AUTHOR INDEX

Abe M., 497
Acciarri N., 77
Adell A., 337
Alberghina M., 477
Alonso-Bedate M., 223
Alonso-Gómez A.L., 223
Anfuso C.D., 477
Appel R., 579
Arakane F., 187
Arese M., 425
Aubert F., 245
Audinat E., 239

Bajgar J., 347
Balcar V.J., 155,179
Barlow-Walden L.R., 497
Bates D.J., 281
Bazan N.G., 435
Beani L., 77
Becherer U., 245
Belluardo N., 443
Bettendorff L., 295
Bianchi C., 77
Bigl M., 69
Bisso G.M., 347
Bladier D., 607
Blanc E., 623
Bochet P., 239
Bolkenius F.N., 587
Breer H., 539
Bussolino F., 425

Calo G., 77
Camargo M.M., 381
Campbell D.B., 103
Caron M., 607
Chan J., 125
Chang J., 455
Chen C.-C., 455
Chen L.-D., 497
Condorelli D.F., 173,443
Constantino M.D., 263

Dalezios Y., 41
Davenne Y., 607
Dawson R.M., 643
Delgado M.J., 223
Dell'Albani P., 443
Dray A., 1

Earley B., 559
Ebadi M., 203
Ebinger G., 615
Ekman R., 351
El Ghonemy S.H.I., 477
Erinoff L., 111
Eschrich K., 69
von Euler G., 397

Fabrizi A., 77
Faden A.I., 489
Ferraro L., 77
Fredholm B.B., 387
de Freitas M.S., 381
Fukuda J., 255
Fukunaga K., 187
Fuller R.W., 47

Gehlert D.R., 47
Geppetti P., 17
Glennon M., 559
Gremo F., 425
Groves P.M., 195

Hall J.M., 17
Hamon M., 305
Han D., 59
Headrick J.P., 489
Hedlund P.B., 397
Heilig M., 351
Hemrick-Luecke S.K., 47
Héron A., 593
Hirayama K., 601
Hisanaga S.-I., 205
Howbert J.J., 47
Huxtable R.J., 537

Ishioka N., 369
Itano Y., 165
Ito J.-I., 91

Jaranowska A., 425
Jensen K.F., 115
Jiang X., 443
Jimenez Del Rio M., 615
Johansen F.F., 239
Johanson S.O., 179

Joó F., 655
Joubert-Caron R., 607
Junien J.-L., 559

Kaczmarek L., 173
Kagaya A., 233
Kapatos G., 601
Kashiwa A., 269
Keino K., 255
Killinger S., 155
Kimelberg H.K., 27
Kishimoto T., 205
Kitamura Y., 165
Kolehmainen E., 357,503
Krushinski J., 47
Kubrulsky C.C., 375
Kuchler-Bopp S., 245
Kurioka S., 369

Lai J.C.K., 527
Lajtha A., 217
Lambolez B., 239
Lasbennes F., 593
Le Saux F., 607
Leonard B.E., 343,559
Leslie R.A., 303
Li Y., 155,179
Li T.-K., 135
Lin W.-W., 455
Linder J.C., 195
Lloyd H.G.E., 387
Lucchi R., 411
Lukasiuk K., 173
Lumeng L., 135
Lupo G., 477
Lutomski D., 607

Mangelsdorf D.C., 281
Masuda M., 91
Matsokis N., 41
de Mattos A.G., 381
McMillen B.A., 337
de Mello C.F., 375
de Mello F.G., 375
Menendez-Pelaez A., 497
Michalek H., 347
Miller D.B., 115
Miyakawa T., 205
Miyamoto E., 187,205

Miyazaki K., 187
Monard D., 587
Morari M., 77
Motohashi N., 233
Mudo G., 443
Myers R.D., 337

Nakamura J., 369
Nakashima H., 205
Na__cz K.A., 635
Na__cz M.J., 635
Natsukari N., 465
Nevo I., 305
Nichols R.A., 465
Nishijima K., 269
Nishikawa T., 85,269
Nomura Y., 53,165

O'Callaghan J.P., 115
Ogita K., 59
Ohkubo T., 369
Okamoto Y., 233
Okamura H., 187
Okomura E., 205
Oliveira J.C., 263
Ono T., 205

Pablos M., 497
Payne R.S., 519
Perkins M., 1
Pessoa-Pureur R., 381
Piazza G., 77
Pickel V.M., 125
Poeggeler B., 497
Poli A., 411

Quach H.T., 527
Quinonero J., 607
Quirosa-Guillou C., 245

Rahmann H., 579
Recasens M., 623
Reilly M.A., 217
Reis R.A.M., 375
Reiter R.J., 497
Renko D., 245
Ribeiro J.A., 263
Ridings J.A., 281
Riederer B.M., 245
Rigor B.M., 519
Robertson D.W., 47
Rodriguez de Turco E.B. 435
Rosati A.M., 411
Rossier J., 239
Rousseau B., 245

Samochocki M., 571
Satake M., 187
Sato J., 369
Schmidt M.L., 145
Schober D.A., 47
Schurr A., 519
Sebastião A.M., 263
Seylaz J., 593
Slenzka K., 579
Smith W.E., 527
Sogos V., 425
Soldi R., 425
Springhetti V., 593
Strosznajder J., 571

Tada T., 91
Takahashi K., 85,269
Takeda A., 369
Tanaka R., 91
Tareilus E., 539
Tashima K., 205
Thal C., 245

Tohda M., 53
Traversa U., 411
Trojanowski J.Q., 145

Umino A., 269
Umino A., 85
Urushihara H., 53

Valcana T., 41
Valenciano A.I., 223
Vanderhaeghen J.-J., 203
Vatassery G.T., 527
Vauquelin G., 615
Velez-Pardo C., 615
Vignes M., 623
Vink R., 489

Walker K., 1
Wannmacher C.M.D., 381
Wawrze_czyk A., 635
Weiss B., 465
Wiggert B.N., 303
Wong D.T., 47

Yamada K., 205
Yamaguchi T., 255
Yamamoto H., 205
Yamawaki S., 233
Yoneda Y., 59
Young S.J., 195

Zanetta J.-P., 245
Zhang S.-P., 465
Zhou F.C., 135
Zimmermann H., 656
Zlokovic B.V., 99

SUBJECT INDEX

βA4-amyloid - interaction with phosphofructokinase, 69
1S,3R-trans aminocyclopentane dicarboxylate - regulates PKC, 623
A_1 adenosine receptor binding - characteristics, 263
A_1 adenosine receptor binding - influence of ascorbate/Fe3+, 263
A_1 and A_2 receptors in goldfish brain, 411
acetylcholine synthesis - effect of carnitine, 635
acetylcholinesterase - carbamylation and decarbamylation, 643
acetylcholinesterase - influence of oxime, 643
acetylcholinesterase - inhibited by paraxon, 347
adenosine - concentration regulated by adenosine deaminase and kinase, 387
adenosine deaminase - effect on extracellular adenosine concentrations, 387
adenosine kinase - effect on extracellular adenosine concentrations, 387
adenosine receptors in goldfish brain, 411
age-induced changes in dopamine D_2 receptor binding, 397
aging - and release of arachidonic acid and inositol phosphates, 571
alcohol - influence on serotonergic system, 135
alcohol abuse, 305
alcohol drinking - and neurotransmitters, 337
alcohol drinking - animal models, 338
alcoholism, 305
Alzheimerís βA4-amyloid - interaction with phosphofructokinase, 69
Alzheimerís disease - and tau, 205
amino acid neurotransmitters - and alcohol, 305
^{3}H- AMPA binding - effect of glutamate transport ligands, 157
AMPA receptors - regulate glutamate metabotropic receptors, 77
antidepressants - effect on neuropeptide Y and corticotropin-releasing hormone, 351
antidepressants - inhibit NMDA-induced currents, 53
arachidonic acid - release reduced by activation of serotonin or muscarinic receptors, 571
arylalkylamine N-acetyltransferase activity - in frog retina, 223
arylamine N-acetyltransferase activity - in frog retina, 223
ascorbate/Fe^{3+}-induced peroxidation - of A_1 adenosine receptor binding, 263
aspartame - does not affect glutamate or NMDA binding, 217
aspartame - perinatal treatment influences glutamate and aspartate brain content, 217
^{3}H-aspartate binding - effect of glutamate transport ligands, 157
aspartate brain content - affected by perinatal treatment with aspartame, 217
astrocyte receptors - functions, 31
astrocytes - different receptor-types, 27
astrocytes - extraction and reconstitution of filaments, 91
astrogliosis, 115
axonal growth - stimulated by veratryguanidine methane sulfonate, 245

bradykinin - hydrolysis, 3

c-fos immunoreactivity - induced by methamphetamine, 85
C_6 glioma - PKC isoforms, 455
calbindin D-28K expression - effect of insulin and insulin-like growth factor-1, 255
calcium - potentiates binding of ^{3}H-MK-801, 59
calcium channels, 539
calcium mobilisation - inhibited by lithium, 233
calmodulin - in PC12 cells, 465
calmodulin - interaction with histones, 465
calretinin expression - effect of insulin and insulin-like growth factor-1, 255
cAMP-dependent protein kinase - influence of gangliosides, 187
carbamylation - of acetylcholinesterase, 643

carnitine - effect on synthesis of acetylcholine, 635
catecholamine neurotoxicity - ultrastructural analysis, 125
channels - calcium-type, 539
cholesterol - oxidation by free radicals, 527
cholinesterase reactivator HI-6, 347
^{3}H-CNQX binding - effect of glutamate transport ligands, 157
constitutive factor NF-κB-like DNA binding activity, 173
convulsions - induced in mice, 369
convulsions in mice - caused by pyridoxal phosphate, 369
copper - promotes binding of dopamine to "serotonin binding proteins", 615
corticotropin-releasing hormone - effect of antidepressants, 351
cytoskeletal proteins - phosphorylation, 381

decarbamylation - of acetylcholinesterase, 643
development - of dopamine D_2-receptors in brain, 397
dizocilpine, see MK 801
dopamine in PC12 cells - effect of MPP+, 165
dopamine - binding to "serotonin binding proteins", 615
dopamine D_2 receptor - in different aged brains, 397
dopamine D_2 receptors - regional localisation in rat brain, 397
dopamine release - effected by MK-801, 269
down-regulation of PKC, 455
dynorphin-A - causes energy depletion, edema and neurological dysfunction, 489

edema - caused by intrathecal injection of dynorphin-A, 489
energy depletion - caused by dynorphin-A, 489
ethanol , see alcohol
excitatory amino acid receptors - in human cerebral cortex, 77
excitatory amino acids - influence on phosphatidylinositol turnover, 77
excitotoxin damage - protection by MK-801, 519

^{3}H-flunitrazepam - interaction with ^{3}H-GABA binding sites, 41
free radicals - inactivate protease nexin-1, 586
free radicals - oxidises vitamin C, vitamin E, cholesterol and thiols, 527

$GABA_A$ receptor - effect of alcohol, 305
^{3}H-GAB_A - interaction with ^{3}H-flunitrazepam binding sites, 41
$GABA_A$ receptor - effect of pyridoxal phosphate, 369
gangliosides - influence on cAMP-dependent protein kinase, 187
gene expression - effect of NMDA, 443
gene expression - effect of platelet activating factor, 435
genetic models - for alcohol drinking, 338
GFAP - induction by various toxicants, 115
glia filament from astrocytes - extraction and reconstitution, 91
glial fibrillary acid protein = see GFAP
gliosis, 115
glucagon release - effect of myelin basic protein, 357
glucose-6-phosphate dehydrogenase activity - in cichlid fish, 579
glucose-6-phosphate dehydrogenase activity - influenced by gravity, 579
glutamate analogues - effect on glutamate decarboxylase, 182
glutamate binding - not affected by aspartame, 217
glutamate brain content - affected by perinatal treatment with aspartame, 217
glutamate decarboxylase - two forms isolated from cerebral cortex, 179
glutamate decarboxylase -activity inhibited by various glutamate analogues, 182
glutamate metabotropic receptors - regulated by AMPA receptors, 77
glutamate release - caused by veratridine or ischaemia, 593
glutamate release - influenced by THA, 593
glutamate transmission - potentiated by PAF, 435
glutamate transport ligands - effect on binding of different glutamate ligands, 157
glutathione peroxidase activity - stimulated by melatonin, 497

histones - interaction with calmodulin, 465
hypoxia - protection of MK-801, 519

immediate early gene expression - induced by mechanical injury, 443
immonocytochemistry - to analyse toxicity, 125
immunocytochemistry - quantitative use, 135
immunohistochemistry - detection of toxic injury, 145
inducible factor NF-κB-like DNA binding activity, 173
inflammation - involvement of kinins, 17
inositol phosphate receptors - activated by NMDA in retina, 375
inositol phosphates - reduced release by activation of serotonin or muscarinic receptors, 571
inositol phosphates - stimulated by NMDA, 375
insulin - effect on expression of calretinin and calbindin D-28K, 255
insulin - released by myelin basic protein, 503
insulin release - effect of myelin basic protein, 357
insulin-like growth factor-1 - effect on calretinin and calbindin D-28K, 255
ischaemia - and glutamate release, 593
ischaemia - and migraine, 18

JO 1784 - sigma ligand, 559

^{3}H-kainate binding - effect of glutamate transport ligands, 157
kallidin - hydrolysis, 3
kinin receptors in the nervous system, 1
kinins - in the nervous system, 1
kinins - invovement in inflammation, 17

lipid peroxidation - inhibits acyl-CoA:1-acyl-sn-glycero-3-phosphocholine-O-acetyl transferase in brain membranes, 477
lipid peroxidation - phosphocholine cytidylytransferase activity not inhibited in brain membranes, 477lithium - inhibits intracellular Ca^{2+} mobilisation, 233

manganese - promotes binding of dopamine to "serotonin binding proteins", 615
mechanical injury - induced immediate early gene expression, 443
melatonin - stimulates glutathione peroxidase activity, 497
methamphetamine - induces nuclear c-fos immunoreactivity, 85
α-methylphenyalanine - effect of ^{32}P incorporation into cerebral proteins, 38
microfilament from astrocytes - extraction and reconstitution, 91
migraine - and brain ischaemia,18
MK-801 - influences release of dopamine, 269
MK-801 - protects against hypoxia and excitotoxin damage, 519
^{3}H-MK-801 binding - effect of phospholipases, 62
^{3}H-MK-801 binding - potentiated by calcium, 59
MK-801 induce release of dopamine - tetrodotoxin-sensitive, 269
models - for alcohol drinking, 338
MPP+ - effect on dopamine and tyrosine hydroxylase mRNA in PC12 cells, 165
MPP+ = 1-methyl-4-phenylpyridinium
MPTP - neurotoxicity, 195
MPTP = 1-methyl-4phenyl-1,2,3,6-tetrahydropyridine
MPTP-neurotoxicity to basal ganglia - electron microscopical studies, 195
mRNA of tyrosine hydroxylase - in PC12 cells, 165
muscarinic M_1 and M_2 receptors - localisation, 559
muscarinic receptors - reduces arachidonic acid and inositol phosphates release, 571
myelin basic protein - causes insulin release, 503
myelin basic protein - insulin and glucagon release, 357

neuroblastoma cells - thiamine homeostasis, 295
neurological dysfunction - caused by dynorphin-A, 489
neuromodulatory mechanisms - and alcohol, 305
neuropeptide Y - effect of antidepressants, 351
neurotoxicants - their targets, 119
neurotoxicity - analysis by immunocytochemistry, 125

neurotoxicity - assessment by neuroanatomical methods, 111
neurotoxicity - in basal ganglia, 195
neurotoxicity - to catecholamine neurones, 125
neurotransmitters - and alcohol drinking, 337
neurotransmitters - and alcohol, 305
neurotrophic factors - in nerve regeneration, 281
NF-κB-like DNA binding activities - in cultured cells, 173
NF-κB-like DNA binding activities - transcription factors, 173
NG 108-15 hybrid cells - PKC isoforms, 455
NGF-like activity - in nerve regeneration, 281
NMDA - coupled to inositol phosphate receptors, 375
NMDA binding - not affected by aspartame, 217
NMDA brain RNA - injected into *Xenopus* oocytes, 53
NMDA receptor - effect of alcohol, 305
NMDA receptor activation - effect on gene expression, 443
NMDA-induced currents - inhibited by antidepressants, 53
noradrenaline - influence of alcohol, 305
noradrenaline uptake - inhibited by halogenated analogues, 47
norepinephrine - see noradrenaline

oligoclonal lectin-like IgGs - localised in brain after surgical injury, 607
oxime - effects on acetylcholinesterase, 643
oxygen radical generation - causes perturbation of membrane structure, 477

PAF, see platelet activating factor
paraxon - inhibits acetylcholinesterase, 347
PC12 cells - localisation of calmodulin, 465
peroxidation - of A_1 adenosine receptor, 263
perturbation of membrane structure - caused by free radicals, 477
pharmacology - of calcium channels, 539
phenylalanine - effect on ^{32}P incorporation into cerebral proteins, 381
phosphate incorporation into cerebral proteins, 381
phosphatidylinositol turnover - caused by excitatory amino acids, 77
phosphofructokinase - interaction with Alzheimer's βA4-amyloid, 69
phosphoinositide hydrolysis - in hippocampal neurones, 623
phospholipases - effect on ^{3}H-MK-801 binding, 62
phosphorylation - of cytoskeletal proteins, 381
PKC - expression of isoforms in neurones and glial, 455
PKC - regulated by 1S,3R-trans aminocyclopentane dicarboxylate, 623
PKC - regulated by quisqualate, 623
PKC - translocation and down-regulation, 455
PKC isoforms - in C_6 glioma and NG 108-15 hybrid cells, 455
platelet activating factor - effect on gene expression and synaptic messenger, 435
platelet activating factor - in CNS, 425
platelet activating factor - potentiates glutamate transmission, 435
platelet activating receptors - in CNS, 428
presynaptic calcium channels, 539
protease nexin-1 - inactivated by free radicals, 586
protein kinase C, see PKC
pyridoxal phosphate - acts on $GABA_A$ receptor, 369
pyridoxal phosphate - induces convulsions, 369
pyruvoyl tetrahydropterin synthase mRNA - expression and regulation, 601

quisqualate - regulates PKC, 623

reactive gliosis, 115
receptors - for platelet activating factor, 428
receptors - on astrocytes, 27
Reeler mice - GABA and flunitrazepam binding sites, 41
regeneration of nerve - involvement of neurotrophic factors, 281
retina - arylamine and arylalkylamine N-acetyltransferase activities, 223
retina - inositol phosphate receptors, 375

reverse transcription and polymerase chain reaction - in single cells, 239

sciatic nerve - collection of neurotrophic factors, 281
sciatic nerve regeneration - stimulated by veratryguanidine methane sulfonate, 245
serotonergic system - effect of alcohol, 305
serotonin binding proteins - bind dopamine, 615
serotonin innervation - effect of alcohol, 135
serotonin receptors - reduces arachidonic acid and inositol phosphates release, 571
sigma ligand - JO 1784, 559
single cell RT-PCR - proceeds without risk of genomic DNA amplification, 239
single cell RT-PCR, 239
synaptoneurosomes - and release of arachidonic acid and inositol phosphates, 571

tau - and Alzheimerís disease, 205
tau - dephosphorylation of abnormal sites, 205
tetrodotoxin - blocks MK-801-induced release of dopamine, 269
THA - effect on glutamate release, 593
THA = threo-3-hydroxy-DL-aspartate
thiamine homeostasis - in neuroblastoma cells, 295
thiols - oxidation by free radicals, 527
threo-3-hydroxy-DL-aspartate - glutamate uptake inhibitor, 593
tomoxetine - halogenated analogues inhibit norarenaline uptake, 47
tonic-clonic convulsions - induced in mice, 369
toxic injury - immunohistochemical detection, 145
toxicokinetics, 104
translocation of PKC, 455
trimethyltin treatment of rats, 559
tyrosine hydroxylase mRNA in PC12 cells - effect of MPP+, 165

veratridine - and glutamate release, 593
veratrylguanidine methane sulfonate - stimulates axonal growth, 245
vitamin C - oxidation by free radicals, 527
vitamin E - oxidation by free radicals, 527
voltage-dependent calcium channels, 539

xanthine oxidase-derived free radicals, 586
Xenopus oocytes - injected with NMDA brain RNA, 53